

**WHAT IS CLAIMED IS:**

1 1. A method of providing a remote networked computer with a  
2 service session using one of a plurality of similarly  
3 functioning software applications residing on different  
4 servers with different unique network addresses, the method  
5 comprising:

6 receiving, from the remote computer and at a device  
7 having a unique network address that is different from the  
8 network address of any of the servers, a packet-based message  
9 comprising a request for a service session;

10 assigning one of the several servers to be used by the  
11 remote computer in the service session; and

12 transmitting, to the remote computer, a packet-based  
13 message comprising the unique network address of the assigned  
14 server for the remote user to address subsequent messages  
15 during the service session.

1 2. The method of claim 1 further comprising receiving, at the  
2 assigned server, subsequent packet-based messages from the  
3 remote computer as part of the service session, the  
4 subsequent messages each being addressed to the unique  
5 network address of the assigned server.

1 3. The method of claim 2 further comprising, receiving, at the  
2 assigned server, periodic packet-based test messages from  
3 the remote computer, and in response, transmitting a  
4 packet-based message back to the remote computer to  
5 indicate an operable connection.

1 4. The method of claim 1, wherein the device that receives the  
2 message comprising a request for a service session is a  
3 load balancer.

1 5. The method of claim 1, wherein the software applications  
2 involve interaction between multiple remote computers.

1 6. The method of claim 5, wherein the software applications  
2 provide Internet telephony service.

1 7. The method of claim 5, wherein the software applications  
2 are multiple-user gaming applications.

1 8. The method of claim 5, wherein the software applications  
2 are music-sharing applications.

1 9. The method of claim 5, wherein the software applications  
2 are peer-to-peer applications.

1 10. The method of claim 4, wherein the message comprising  
2 a request for a service session includes a network address  
3 header containing the unique network address of the load  
4 balancer, a data port address header, and data fields  
5 associated with the software application.

1 11. The method of claim 10, wherein the data fields  
2 associated with the software application includes a length  
3 field, a type field, and a field containing the network  
4 address of the remote computer that requested the service  
5 session.

1 12. The method of claim 1, wherein the message transmitted  
2 to the remote computer comprising the unique network  
3 address of the assigned server includes a network address  
4 header containing a unique network address associated with  
5 the remote computer that requested the service session, a  
6 data port address header, and data fields associated with  
7 the software application.

1 13. The method of claim 12, wherein the data fields  
2 associated with the software applications includes a length  
3 field, a type field, and a field containing the network  
4 address of the assigned server.

1 14. The method of claim 1, wherein the unique network  
2 addresses are all unique IP addresses.

1 15. The method of claim 1, wherein the packet-based  
2 message comprising the unique network address of the  
3 assigned server is transmitted by the assigned server.

1 16. The method of claim 1, wherein the packet-based  
2 message comprising the unique network address of the  
3 assigned server is transmitted by a load balancer.

1 17. An apparatus for providing service sessions to remote  
2 networked computers, comprising:

3 a plurality of servers each having a different unique  
4 network address, each of the servers for executing a similarly  
5 functioning software application to provide a service session;

6 a load balancer having a unique network address different  
7 from the unique network address of any of the servers, the  
8 load balancer comprising a first processor and first memory  
9 for storing thereon instructions that when executed by the  
10 first processor assigns, in response to receiving from a  
11 remote networked computer a packet-based message comprising a  
12 request for a service session, one of the servers to be used  
13 by the remote computer in the service session;

14 a second processor and second memory for storing thereon  
15 instructions that when executed by the second processor  
16 transmits, to the remote networked computer that requested  
17 service, a packet-based message containing the identity of the  
18 unique network address of the assigned server to which the  
19 remote networked computer is to address packet-based messages  
20 during the service session.

1 18. The apparatus of claim 17, wherein the first and  
2 second processors are the same, and the first and second  
3 memory are the same, the second processor and second memory  
4 thus being part of the load balancer.

1 19. The apparatus of claim 17, wherein the second  
2 processor and the second memory are part of the assigned  
3 server.

1 20. The apparatus of claim 17, wherein the software  
2 applications involve interaction between multiple remote  
3 users.

1 21. The apparatus of claim 20, wherein the software  
2 applications are Internet telephony applications.

1 22. The apparatus of claim 20, wherein the software  
2 applications are multiple user gaming applications.

1 23. The method of claim 20, wherein the software  
2 applications are music-sharing applications.

1 24. The method of claim 20, wherein the software  
2 applications are peer-to-peer applications.

1 25. The apparatus of claim 17, wherein the message  
2 comprising a request for a service session includes a  
3 network address header containing the unique network  
4 address of the load balancer, a data port address header,  
5 and data fields associated with the software application.

1 26. The apparatus of claim 25, wherein the data fields  
2 associated with the software application includes a length  
3 field, a type field, and a field containing the network  
4 address of the remote computer that requested the service  
5 session.

1 27. The apparatus of claim 17, wherein the message  
2 transmitted to the remote computer comprising the unique  
3 network address of the assigned server includes a network  
4 address header containing a unique network address  
5 associated with the remote computer that requested the  
6 service session, a data port address header, and data  
7 fields associated with the software application.

1 28. The apparatus of claim 27, wherein the data fields  
2 associated with the software applications includes a length  
3 field, a type field, and a field containing the network  
4 address of the assigned server.

1 29. The apparatus of claim 17, wherein the unique network  
2 addresses are all unique IP addresses.

1 30. An apparatus that assigns, for a service session, one  
2 of a plurality of servers with unique network addresses,  
3 each of the plurality of servers being capable of executing  
4 a similarly functioning software application to provide the  
5 service session, the apparatus comprising:

6 a unique network address that is different from the  
7 unique network address of any of the plurality of servers;  
8 a processor; and

9 memory for storing thereon instructions that when  
10 executed by the processor perform the following functions:

11 assigns one of the servers to be used by a remote  
12 computer in the service session in response to receiving  
13 a packet-based message comprising a request for the  
14 service session from the remote computer; and

15 transmits, to the remote computer that requested the  
16 service session, a packet-based message containing the

17 unique network address of the assigned server to which  
18 the remote computer is to address packet-based messages  
19 during the service session.

1 31. The apparatus of claim 30, wherein the message  
2 comprising a request for a service session includes a  
3 network address header that contains the unique network  
4 address of the apparatus, a data port address header, and  
5 data fields associated with the software application.

1 32. The apparatus of claim 31, wherein the data fields  
2 associated with the software application includes a length  
3 field, a type field, and a field containing the network  
4 address of the remote computer that requested the service  
5 session.

1 33. The apparatus of claim 30, wherein the message  
2 transmitted to the remote computer comprising the unique  
3 network address of the assigned server includes a network  
4 address header containing a unique network address  
5 associated with the remote computer that requested the  
6 service session, a data port address header, and data  
7 fields associated with the software application.



1 34. The apparatus of claim 33, wherein the data fields  
2 associated with the software applications includes a length  
3 field, a type field, and a field containing the network  
4 address of the assigned server.

1 35. Computer readable medium having stored thereon program  
2 instructions that when executed by a processor in a  
3 networked computer perform the following functions:

4 transmits, in response to a predetermined user command  
5 input to the networked computer, a packet-based message  
6 comprising a request for a service session to a remote service  
7 provider, the message being addressed to a unique network  
8 address associated with the service provider, the service  
9 provider comprising a plurality of different servers with  
10 different unique network addresses, each of the servers having  
11 thereon similarly functioning software applications to provide  
12 a service session;

13 in response to receiving from the service provider a  
14 packet-based message comprising a unique network address for  
15 one of the plurality of servers that has been assigned for the  
16 service session, transmits during the service session packet-  
17 based messages addressed to the unique network address of the  
18 assigned server.

1 36. The computer readable medium of claim 35, wherein the  
2 service session involves interaction between multiple  
3 networked computers remote from the service provider.

1 37. The computer readable medium of claim 36, wherein the  
2 service session is an Internet telephony application.

1 38. The computer readable medium of claim 36, wherein the  
2 service session is a multiple-user gaming application.

1 39. The computer readable medium of claim 35, further  
2 comprising instructions that when executed by the processor  
3 perform the following functions:

4 periodically transmits during the service session  
5 packet-based test messages addressed to the unique network  
6 address of the assigned server;

7 determines that a connection with the assigned server  
8 is disconnected if a packet-based message responding to the  
9 test message is not received from the assigned server  
10 within a predetermined period of time.

1 40. The computer readable medium of claim 39, further  
2 comprising instructions that when executed by the processor  
3 perform the following function:

4 in response to determining that a connection with the

